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09/400,649	09/21/1999	ANDREW J. SZABO	SZABO-201.1	3645

10037 7590 03/09/2007 MILDE & HOFFBERG, LLP 10 BANK STREET SUITE 460 WHITE PLAINS, NY 10606	**EXAMINER** RIMELL, SAMUEL G.

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/400,649
Filing Date: September 21, 1999
Appellant(s): SZABO, ANDREW J.

Steven M. Hoffberg
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed November 22, 2006 appealing from the Final

Office action mailed January 7, 2004.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct. The amendment after final rejection filed on May 6, 2004 has been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

U.S. Patent 5,845,255 to Mayaud. Published December 1, 1998. Filed October 2, 1997. Continuation of Application 08/330,745, filed October 28, 1994.

(9) Grounds of Rejection

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 60 and 67-73 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 60: The original disclosure does not state that the "likelihood of adoption" is part of the optimization process, or is a variable in the optimization process. This amended phrase is thus new matter.

Claim 67: The original disclosure does not state that the "likelihood of adoption" is a variable in a joint analysis. This amended phrase is thus new matter.

Claims 68-73: Claims 68-73 depend from claim 67.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 29-33, 35-50, 52-59, 61-66 and 74 are rejected under 35 U.S.C. 102(e) as being anticipated by Mayaud (U.S. Patent 5,845,255).

Claim 29: FIG. 7 of Mayaud discloses a user interface which receives input from a user in the form of a medical condition to evaluate records (medications) for prescription to a patient. In the case of FIG. 7, the user input is the condition "PUD/Gastritis".

A subset of records (suggested medications in FIG. 7) are then automatically created based upon the classification of information (formulary/non-formulary drugs) and the user input ("PUD/Gastritis").

As described at col. 39, lines 55-67, the initially selected drug can be evaluated in accordance with the patient's history record. That record includes a listing of drug allergies (col. 19, lines 28-30). Drug allergies are a statistical risk associate with a record of a drug in a database.

As described at col. 39, lines 43-54, the system allows determination of economic parameters (cost of drug) and allows the physician to select or block drugs based on cost.

The resulting output is shown in FIG. 11, and will include a drug or drugs that have been automatically (by computer) optimized for both the risk to the patient and the economic cost. This is considered to be an automatic optimization since it is performed by the assistance of a computer program, and a joint optimization since it considers two separate variables (cost and allergic risk)

Claim 30: The user input ("PUD/Gastritis") is health information.

Claim 31: Col. 19, lines 28-30 call for the input of patient allergies, which reads as an input of data pertaining to risk tolerance.

Claim 32: FIG. 7 is a user interface.

Claim 33: The economic parameters which are considered (col. 39, lines 44-54) pertain to cost.

Claim 35: The user input ("PUD/Gastritis") is a semantic expression.

Claim 36: In FIG. 7, the user can input a preference, such as a preference for formulary or non-formulary medications.

Claim 37: The user feedback is a selection of a drug for a patient. If the user receives warnings about that drug (col. 40, lines 1-19), the drug selection can be cancelled and another drug selection made.

Claim 38: Col. 39, lines 44-54 outline a plurality of different optimization procedures which can be followed.

Claim 39: Col. 9, lines 44-45 call for the creation of an electronic prescription which is transmitted electronically to a pharmacy. This inherently leads to the transaction of a sale of a medication at a pharmacy.

Claim 40: The transmission of the electronic prescription is a transmission between a server (206) and a client computer at a pharmacy.

Claim 41: The system of Mayaud utilizes the Internet (col. 48, line 2).

Claim 42: The system of Mayaud is implemented by a network of a computer systems each containing programmed instructions for controlling the respective computers.

Claim 43: FIG. 7 is a graphic user interface.

Claim 44: See claim 29. The user relevance parameter is the input of ("PUD/Gastritis") by the user in FIG. 7.

Claim 45: See remarks for claim 30.

Claim 46: The facility (206) functions as a search engine for searching databases (210, 212).

Claim 47: See remarks for claim 41.

Claim 48: See remarks for claim 33.

Claim 49: Col. 40, lines 1-10 discuss the presentation of drugs, as well as choices of alternative drugs that can be presented to the user. These choices are presented based upon the user input of risks (allergies/interactions) and economic parameters (cost).

Claim 50: The input of a disease by a user, such as "PUD/Gastritis" pertains a population grouping, since a population of patients can have this disease.

Claim 52: See remarks for claim 37.

Claim 53: See remarks for claim 38.

Claim 54: See remarks for claim 39.

Claim 55: See remarks for claim 40.

Claim 56: See remarks for claim 41.

Claim 57: See remarks for claim 42.

Claim 58: See remarks for claim 43.

Claim 59: See remarks for claim 29. The "specification" is the indication of disease "PUD/Gastritis" by the user in FIG. 7.

Claim 61: See remarks for claim 38.

Claim 62: Col. 19, line 30 calls for the input of a relevance profile (allergic reaction information).

Claim 63: See remarks for claim 39.

Claim 64: See remarks for claim 41.

Claim 65: See remarks for claim 42.

Claim 66: See remarks for claim 43.

Claim 74: Col. 39, line 50 illustrates that the economic parameters are dictated by an external third party (benefit management company).

(10) Response to Argument

Preliminary Note: Pages 13-21 of the brief are discussions pertaining to the content of the claims and reasons for separate consideration of particular claims. No discussions regarding the applied statutory rejections appear in this portion of the appellant's brief, so no rebuttal of this discussion appears necessary.

Rejection of claims 60 and 67-73 under 35 USC 112 First Paragraph

Claim 60: Appellant's arguments are presented on pages 12-16 of the brief, with additional arguments at page 25. Claim 60 was rejected under 35 USC 112. first paragraph as containing new matter. Specifically, claim 60 recites "likelihood of adoption" as part of the optimization and the office action indicated that such feature was not suggested in the original specification. The rejection is sustained for same reasons as those presented for claim 67 herein, specifically, that none of the quotations cited on pages 22-27 of the appeal brief refer to likelihood of adoption as being a factor in optimization process. The first quotation provided on page 22 of the brief refers to a likelihood to adopt simple changes in diet. There is no suggestion or discussion indicating that the likelihood of adoption is a factor in the optimization process to which applicant's claimed invention is directed. The remaining quotations provided from page 22 through 27 make no reference to this feature at all. Additionally, there is no objective evidence provided that the skilled artisan would have recognized likelihood of adoption as a

factor in the optimization process, and arguments to such effect appear to be more along the lines of after-thought than invention.

Claim 67: Claim 67 was rejected under 35 USC 112, first paragraph for have been amended to recite new matter. The issue is whether "likelihood of adoption" is a variable in joint analysis. As discussed with respect to claim 60 above, the original disclosure provides no suggestion that likehood of adoption is utilized as a variable in a joint analysis, or in any kind of analysis originally disclosed. References in the original disclosure to the user refusing to accept a proposal (page 24, second paragraph of brief), temperance and variety (page 24, third paragraph of brief), acceptable changes in diet (page 25, third paragraph of brief) and user aggressiveness (page 25, fourth paragraph of brief) appear to have no bearing whatsoever on the claim language at issue.

Claims 68-69: Appellant presents arguments for claims 68-69 at page 32 of the brief. However, the discussion is made in reference to the Mayaud reference which was not applied to these claims. Accordingly, these arguments are moot.

Claims 70-73: Discussion for claims 70-73 are provided at page 36 of the brief. However, the discussion is made in reference to the Mayaud reference which was not applied to these claims. Accordingly, these arguments are moot.

Rejection of claims 29-33, 35-50, 52-59, 61-66 and 74 under 35 USC 102(e) as anticipated by Mayaud (U.S. Patent 5,845,255)

Independent claim 29: For claim 29, arguments are presented on pages 29-30 of the brief. However, none of the sections relied upon by appellant were cited by the examiner, and appellant makes no attempt to address any of the figures or sections which were actually cited by

the examiner as the basis for the final rejection. In just the discussion of claim 29 alone, examiner provided five different citations from Mayaud (two figures and three section quotes) to support the rejection, to which appellant has not discussed or considered a single one.

Examiner maintains that Mayaud teaches the joint optimization of economic and risk factors, and taught by Mayaud in col. 39, lines 43-67, FIGS. 7 and 11 and supported by the explanation associated with claim 29.   Appellant has not addressed any of these citations.

Mayaud is generally directed to the concept of providing an optimal choice of medication as a recommendation to a physician based on inputs of several different types of information derived from a patient. Arguing that the prescription system of Mayaud does not provide an optimal choice or optimized choice logically leads to the conclusion that the system of Mayaud is designed to present inferior or non-optimized choices. Such a line of reasoning clearly runs contrary to the teachings of Mayaud (col. 4, lines 20-34).

Independent claim 44: Appellant's arguments for claim 44 are presented on pages 28-30 of the brief. Appellant's arguments for claim 44 appear to be nothing more than a repetition of part (d) from the claim, followed by a blanket assertion of patentability. No discussion is provided as to Examiner's reference to FIG. 7 provided in the office action.

Independent claim 59: Appellant's arguments for claim 59 are presented on pages 28-30 of the brief. Appellant's arguments for claim 44 appear to be nothing more than a repetition of part (d) from the claim, followed by a blanket assertion of patentability. No discussion is provided as to Examiner's reference to FIG. 7 provided in the office action.

Independent claim 67: Appellant presents arguments for this claim at pages 29 and 31 and argue for distinctions over the Mayaud reference. However, Mayaud was not applied to this claim so these arguments are moot.

Dependent claims 30 and 45: (page 31 of the brief) Appellant argues that there is no teaching of records retrieved in a content sensitive manner and further that patient privacy concerns would weigh against performing such a search. Such arguments are moot, as claims 30 and 45 contain no such requirements. Claims 30 and 45 are addressed to the input of health information and appellant admits the anticipation of this feature in the second line of the discussion.

Dependent Claim 31: (page 32 of the brief) Appellant argues that Mayaud does not teach an input corresponding to a risk tolerance. This argument is not correct. In Mayaud, the input of risk tolerance corresponds to an input by the user (through a selection) of allergy information (col. 19, lines 28-30). This corresponds to the input of data corresponding to risk tolerance. An allergy is a risk factor in drug prescriptions, and the selecting of allergy information is the input of information pertaining to such allergy, as well as indicating intolerance towards the allergen. It is not an output of information at this point in the Mayaud reference, as appellant argues.

Dependent Claims 33, 48, 69: (Page 32 of the brief) Appellant argues that Mayaud does not perform an optimization process based on a joint analysis of two parameters. This argument is not correct. Col. 39, lines 43-54 and col. 39, lines 55-67 of Mayaud establish that the drug selection is optimized by the consideration of two variables, namely, risk of allergic reaction and cost to the patient. It is observed that appellant makes no rebuttal or discussion of the quotations from Mayaud cited by the examiner. Appellant's arguments regarding the application of

Mayaud to claim 69 are moot as Mayaud was not applied to claim 69, or the additionally discussed claim 67.

Dependent Claims 35 and 68: (Page 32 of the brief) Appellant's arguments are ambiguous here, but appear to be suggesting that the term "semantic" implies "non-parametric". This argument is not correct. The word "semantic" was not defined in appellant's original specification, so it does not necessarily imply "non-parametric". Considering the definition of the phrase "semantic expression" as used in claim 35 and in defined in the Merriam Webster Dictionary (on-line version), the phrase implies an expression having a particular meaning. In Mayaud, the phrase "PUD/Gastritis" is an expression that has a particular meaning in medicine, namely, "peptic ulcer disease (PUD)" and "gastric inflammation (gastritis)". Mayaud was not applied to claim 68 so any discussion thereof is moot.

Dependent Claim 36: (Pages 32-33 of brief): Appellant argues that Mayaud does not disclose "re-optimizing based on a user feedback input". This argument is moot, as claim 36 makes no mention of any "re-optimization" process.

Dependent Claims 37 and 52: (Page 33 of the brief) Appellant argues that Mayaud does not disclose an automatic joint optimization of two factors. These arguments are moot as claims 37 and 52 do not recite such features. Claims 37 and 52 is directed to re-optimizing after user input. Such feature is taught by Mayaud (col. 40, lines 1-19) where the user can receive a warning about a drug selection and then make an alternate selection in order to change the output optimized results.

Dependent Claims 38, 53 and 61: (Page 33 of the brief) Appellant argues that the Examiner's quotation from Mayaud does not refer to joint optimization. This argument is moot

as none of claims 38, 53 and 61 make any mention of joint optimization. Instead, these claims are directed to a plurality of optimization procedures and col. 39, lines 44-54 provide for different optimization procedures using different optimization factors.

Dependent Claims 39, 54, 53: (Page 33 of the Brief) Appellant argues that a transaction occurs with a "user", and that a patient is not a user. This argument is moot, as examiner is not making such a correlation. Claim 39 calls for a transaction to occur involving a sale, with a "the person". The "person" is not the same as the "the user" recited in claim 29, so the sale can essentially occur with any "person". In Mayaud, the sale occurs between a pharmacy and a customer. Accordingly, the "person" could either be the pharmacist or a customer in the pharmacy purchasing the subscription. No arguments are presented for claims 54 and 63.

Dependent claims 40 and 55 (Pages 33-34 of the brief) Appellant's argument is a blanket assertion that Mayaud does not teach electronic communication. Appellant's argument does not consider the citation from Mayaud provided by the Examiner which describes a server handling electronic communication.

Dependent Claims 41 and 56: (Page 34 of the brief) Appellant argues that Mayaud does not disclose transactions over the Internet. Appellant does not consider Examiner's citation from Mayaud at col. 48, line 2 teaching communication over the Internet. Appellant's arguments also do not appear to pertain to any of the claim language in claims 41 and 56.

Dependent Claims 43, 58 and 66: (Page 34 of the brief) Appellant argues that "the prior art in general" does not teach the presentation of data through a graphical user interface (GUI). Once again, appellant disregards the citations cited by the Examiner in Mayaud, and does not

even consider Mayaud as the prior art in this instance. In particular, appellant does not address

the teaching of a graphical user interface in FIG. 7 of Mayaud.

Dependent Claim 47: (Page 34 of the brief) Appellant does not address or consider the

citation from Mayaud (col. 48, line 2) which addresses this claim. Appellant's arguments are

merely blanket assertions.

Dependent Claim 49: (Page 34 of the brief) Appellant argues that Mayaud does not teach

the output of a sorted list that is based upon the input parameters. Col. 40, lines 1-10 are

discussed by appellant, but appellant asserts that the features described in the citation do not

pertain to a sorted list. This argument has been considered, but is not correct. Col. 40, lines 1-10

refer to the features of FIG. 11. This figure illustrated a list of drugs that have been sorted out of

the entire drug database based on the input parameters for both cost (col. 39, lines 44-53) and

risk (risk of allergic reaction, col. 39, lines 55-67). The list of the drugs in FIG. 11 is a sorted list.

Dependent Claim 50: (Page 35 of the brief) Appellant does not consider Examiner's

citation from Mayaud, and is essentially a blanket assertion of patentability. The rejection is

maintained for the reasons cited with the discussion of claim 50 above.

Dependent Claim 60: (Page 35 of the brief) No prior art rejections were applied to this

claim. Appellant's arguments regarding Mayaud are moot.

Dependent Claim 62: (Page 35 of the brief) Appellant's arguments do not consider or

discuss the quotation from col. 19, line 30 of Mayaud made in support of the rejection.

Appellant's argument is a blanket assertion that the feature is not taught, without considering the

actual quotation provided.

Dependent Claim 64: (Page 35 of the brief) Claim 64 merely recites the presence of client server environment in deploying the previously discussed optimization process. Appellant admits these features are known and within the Mayaud reference. Appellant presents additional arguments regarding statistical risk that have no bearing on claim 64, as such features are not claimed within claim 64.

Dependent Claims 70-73: (Page 36 of the brief) No prior art rejections were applied to these claims. Appellant's arguments regarding Mayaud are moot.

Dependent Claim 74: (Page 36 of the brief) Appellant's arguments are that Mayaud does not disclose a joint optimization. Claim 74 is not addressed to the joint optimization feature, so appellant's arguments are moot. Claim 74 calls for an economic interest distinct from the user. This is taught at col. 39, line 50 of Mayaud, where reference is made to a third party benefit management company. Appellant makes no attempt to address or discuss this citation from Mayaud.

Additional Arguments: (Pages 38-40 of the brief) Appellant presents arguments pertaining to the definition of the term "statistical risk", such as recited in claims 29 and 44. Appellant also refers to claim 31, although this language does not appear in claim 31. Appellant tries to characterize this term using extrinsic evidence from dictionaries, as opposed to intrinsic evidence from the specification (*Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005). The term "statistical risk" is used only once in appellant's specification (second paragraph of page 16 in the specification) but no definition is provided. The definitions provided by appellant on page 38 of the brief define the term "statistical" but not "statistical risk". Accordingly, none of the evidence provided by appellant establish a supportable definition

for the term "statistical risk". Given no evidence to the contrary, examiner maintains that the

term can encompass the listing of drug allergies in Mayaud, as drug allergies are in fact medical

risks to a statistical population (i.e. patients). This is a logical and reasonable interpretation

which literally correlates to the terms used and no evidence has been provided to contradict this

interpretation. Examiner maintains the validity of this interpretation for the reasons cited.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

- NO EVIDENCE APPENDIX WITH THIS
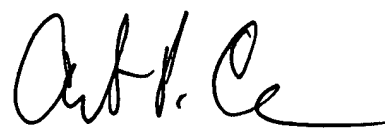EXAMINER'S ANSWER.

—sl
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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Sam Rimell

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Appeal Conference held February 20, 2007 with agreement to proceed to Board